

Work Order ID 143340

Monday, March 21, 2016 8:04:39 AM

143340

Page 1

Item ID: D4154-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Plate

Start Date: 3/23/2016 Start Qty: 8.00

g

Cust Item ID:

Required Date: 3/30/2016 Req'd Qty: 8.00

g

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4154

F

105

0.00

105

Purchasing

Memo

0.00

Purchasing

ISSUE PO 31764
CUT PER DRWG D4154 REV.F**SCRAP**

8

MAR 21 2016

DAS
13
9-89

115

Receive & Inspect for Damage & Mat'l Certs

0.00

115

Packaging

Memo

0.00

Packaging

9x 5p/6-04-7

125

QC5- Inspect part completeness to step on W/O

0.00

125

QC

Memo

0.00

Quality Control

P.T.O.

DQA: _____ Date: _____

QA Closed: 16-04-12 Date: OCT 03 2016**WORK ORDER NON-CONFORMANCE / UPDATE**Work Order update only ☐

Work Order: <u>143340</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☒ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS					
Part No. <u>04154-1</u>		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. <u>16-6076</u>		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Large Fab ☐	Composite ☐	Supplier ☒			

Date: <u>16-04-12</u>	Step #: <u>105</u>	QTY Effective: <u>9</u>	MRB (QS1042) Approval DAS 9 9-89 <u>16-04-20</u>
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Description Work Order Deviation During inspection some dimension where found out tolerance. See attach F.A.I. for detail. R.C. supplier / equipment	Disposition Scrap + destroy.	Completed By DAS 38 9-89 <u>MAY 04 2016</u>
		Lead hand / Supervisor Approval Verification DAS 9 9-89 <u>16-05-04</u> <u>16-04-20</u>
		QC / QA Coordinator Approval DAS 9 9-89 <u>16-05-04</u>

Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☒ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☒ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 143340

Monday, March 21, 2016 8:04:39 AM

143340

Page 2

Item ID: D4154-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Plate

Start Date: 3/23/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 3/30/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Form as per dwg	0.00							
130									
Brake NC	Memo	0.01							
Brake NC									
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.00							
Quality Control									
150	Identify as per dwg & Stock Location: _____	0.00							
150									
Packaging	Memo	0.00							
Packaging	LOCATION: WA001								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 143340

Monday, March 21, 2016 8:04:39 AM

143340

Page 3

Item ID: D4154-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Plate
Start Date: 3/23/2016 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 3/30/2016 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21 - Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.01							
Quality Control									

MCS MAY 04 2016
φ

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Picklist Print

Monday, March 21, 2016 8:04:38 AM

Page 1

Work Order ID: 143340

143340

Parent Item: D4154-1

D4154-1

Parent Item Name: Plate

Start Date: 3/23/2016

Required Date: 3/30/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 10.08.03 new issue DD verf:EC
15.10.16 AS PER DWG REV.F7 DD VERF:JLM

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4154-1P		Purchased		No			Each	0.0000		8			
D4154-1P									**				
Plate													
M304S18GA		Purchased		No		100	sf	269.4960	4.2697	35.95537			
M304S18GA									**				
304/316 .050 Sheet													

9x Spk 04-7

APR 01 2016

DAS
13
9-89

Location

MAT020

M133328

M133587

Loc Qty

269.496

171.996

97.5

Loc Code

m134604

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

ITEM	QTY	P/N	DESCRIPTION
	X	D4154-041	WEARPLATE ASSEMBLY
1	1	D4154-1	PLATE
2	1	D4155-041	WEARBAR ASSEMBLY



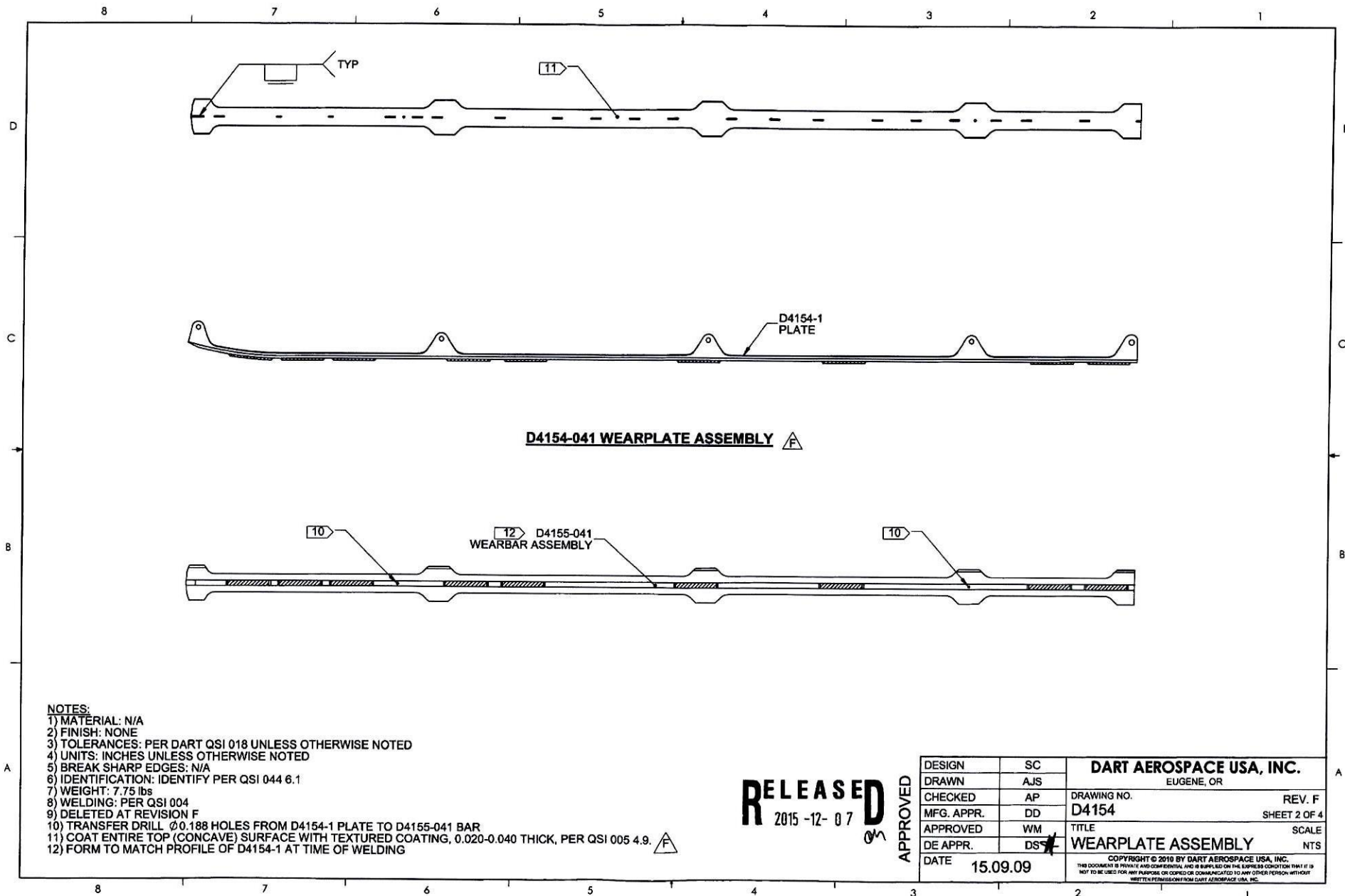
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 143310 MLC
1603-15

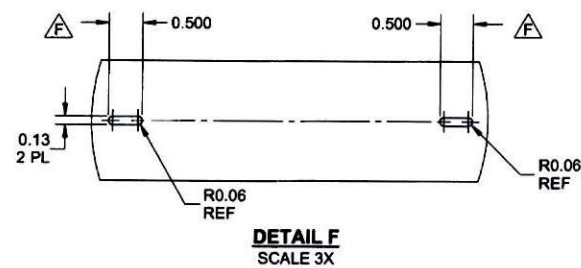
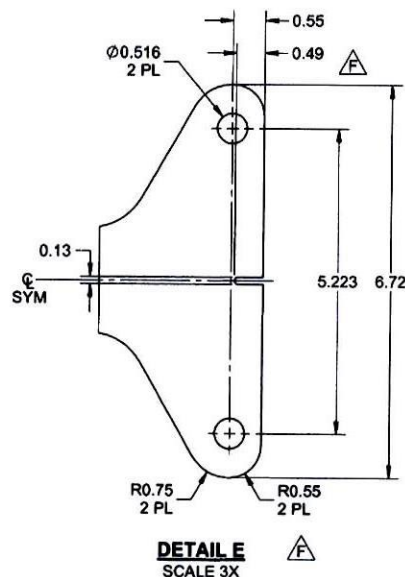
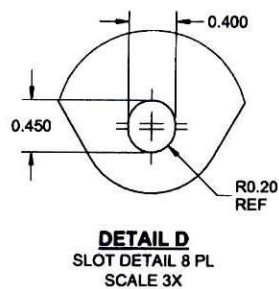
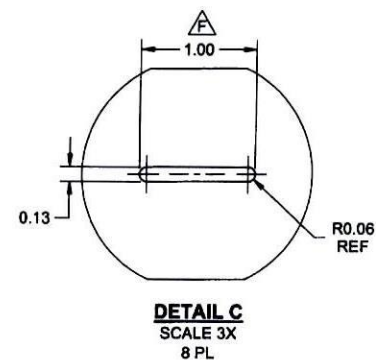
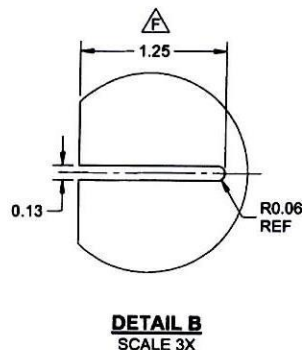
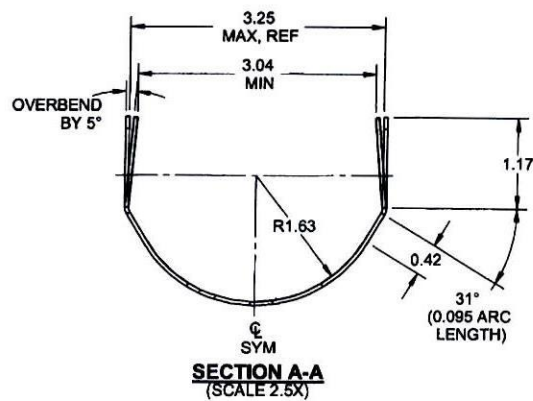
D4154-041 WEARPLATE ASSEMBLY

F	TEXTURED COATING WAS ROCKGUARD (SHT 2). SHT 4 DIMENSION FROM SLOTS WERE CENTER TO CENTER. CREATED CUSTOM FLAT PATTERN AFTER PROTOTYPING DUE TO WELDING SHRINKAGE SEE CIR15-41. HARDCOAT WELD MOVED TO D4155 DRAWING DUE TO CHANGE IN WELDING. D4155-041 WAS D4155-1.	AJS	15.09.09
F	SHT 3 SLOTS RE-PITCHED (PAR 12-213); 0.32 WAS 0.37	AJS	12.08.07
D	70.45 WAS 74.45 & Ø0.188 HOLES NOW 2 PL (ZN C4-3 & C7-3)	RF	12.05.03
C	REVISE NOTE 9 (ZN A8-2); ADD HARDCOAT (ZN B7-2); ADD DETAIL A (ZN C2-2)	RF	12.02.21
B	ITEM 4 WAS PR1422 (D3-1); REMOVED FINISH TO NOTE 2 (A8-2); REMOVED SECTION A-A (NO LONGER REQUIRED); REVISED D4154-1F	MB	11.04.05
A	NEW ISSUE	SC	10.07.22
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4154	SHEET 1 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE ASSEMBLY	NTS
DATE	15.09.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMERCE WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
2015-12-07
ECN 15-657

APPROVED





RELEASED
2015-12-07

APPROVED

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	AP	DRAWING NO.	REV. F
MFG. APPR.	DD	D4154	SHEET 4 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE ASSEMBLY	NTS
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31764**

Purchase Order Date 3/21/2016

PO Print Date 3/21/2016

Page Number 3 of 11

Order From :

VC-TPI001

TPI INDUSTRIES INC.
148 RUE GOODFELLOW
DELSON, QUEBEC J5B 1V4
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 450-633-0484

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Total: \$42.00

6 D3805-1P Plate 4/6/2016 8.00 \$21.25 \$170.00
Yes
4/6/2016 Each

CUT AS PER DWG D3805 REV. C
BI42907
MATERIAL 304 SHEET 18 GA

Line Total: \$170.00

7 D4154-1P Plate 4/6/2016 8.00 \$34.80 \$278.40
Yes
4/6/2016 Each

CUT AS PER DWG D4154 REV. F
BI43340
MATERIAL 304 SHEET 18 GA

Line Total: \$278.40

8 D4406-3P Plate 4/6/2016 4.00 \$27.30 \$109.20
Yes
4/6/2016 Each

CUT AS PER DWG D4406 REV. D
BI43395
MATERIAL 304 SHEET 18 GA

Note:

3/21/2016

T.P.I. INDUSTRIES INC.

148 GOODFELLOW
DELSON, QUÉBEC J5B 1V4
CANADA
Tel: (450) 633-0484
Fax: (450) 633-0879

Packing Slip

Packing Slip No.: 7443
Date: 2016-04-05
Page: 1

Sold to: Dart Aerospace Chantal Lavoie 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Ship to: Dart Aerospace Chantal Lavoie 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 31764	Sold By: JONATHAN LESSARD
Shipped By:	Ship Date: 2016-04-05
Tracking No.:	

Item No.	Unit	Description	Quantity
d3805-1	Chaque	d3805-1 plate	8
✓ d4154-1	Chaque	d4154-1 plate	8
d4406-3	Chaque	d4406-3 plate	4
d4771-1	Chaque	d4771-1 wearplate	4
d4772-1	Chaque	d4772-1 wearplate	4
d4773-1	Chaque	d4773-1 wearplate	4
d5152-1	Chaque	d5152-1 fwd post mount	28

2016-04-7

Comment: Net / 30 from date of invoice 2% svc. chg. on invoices over 30 days

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL SHEET 304L-2B DUAL GRADE
.0480 Nom X 48.0000" X 96.0000"
PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3

METALLURGICAL TEST REPORT

740 Imperial Road North



1 Certificate: 121787

Customer: 007206 001
Certificate: 121787 1
Mail To: THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
ROSELAND, NJ 07068

Customer: 007206 001

CONCORD, ON LAKESIDE

Ship To:
THYSSENKORPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4R5C6

Sh: a

[illegible]

Steel: 304/304L

Date: 12/08/2015 Page: 1

Corrosion: ASTM A262/14;18QBend-OK

Your Order: PEC271093

NAS Order: NM 0072789 01

PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED, UNS 30400/30403
ASTM A240/152, A480/149, S466/15; ASME SA240/13, SA480/13, SA666/13
CHEM ONLY ON FOLLOWING ASTM: A276/13, A479/13, A484/13, A512/13
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513T XMRK; MIL-5059D AND33 (CRN MEAS); MIL-4043B
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED
NACE MR017/ISO 15756-3:2009 A, MR010/07:0805766D-A X MAG PERM

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1 & 2 Compliant

REMARKS:

Product Id	Col1 #	Skid #	Thickness	Width	Weight	-----Length-----	Mark	Pieces	Commodity Code
------------	--------	--------	-----------	-------	--------	------------------	------	--------	----------------

05X013 AA 05X013 A

Mark Pieces Commodity Code

81

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/08 Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

HEAT	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
X013	US	.0214	18.0480	.4390	1.8095	.3690	.0812	8.0010	.0330	.0010

	% IS
07001	
08000	
09000	
10000	
11000	
12000	
13000	
14000	
15000	
16000	
17000	
18000	
19000	
20000	
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99000	

0862

MECHANICAL PROPERTIES

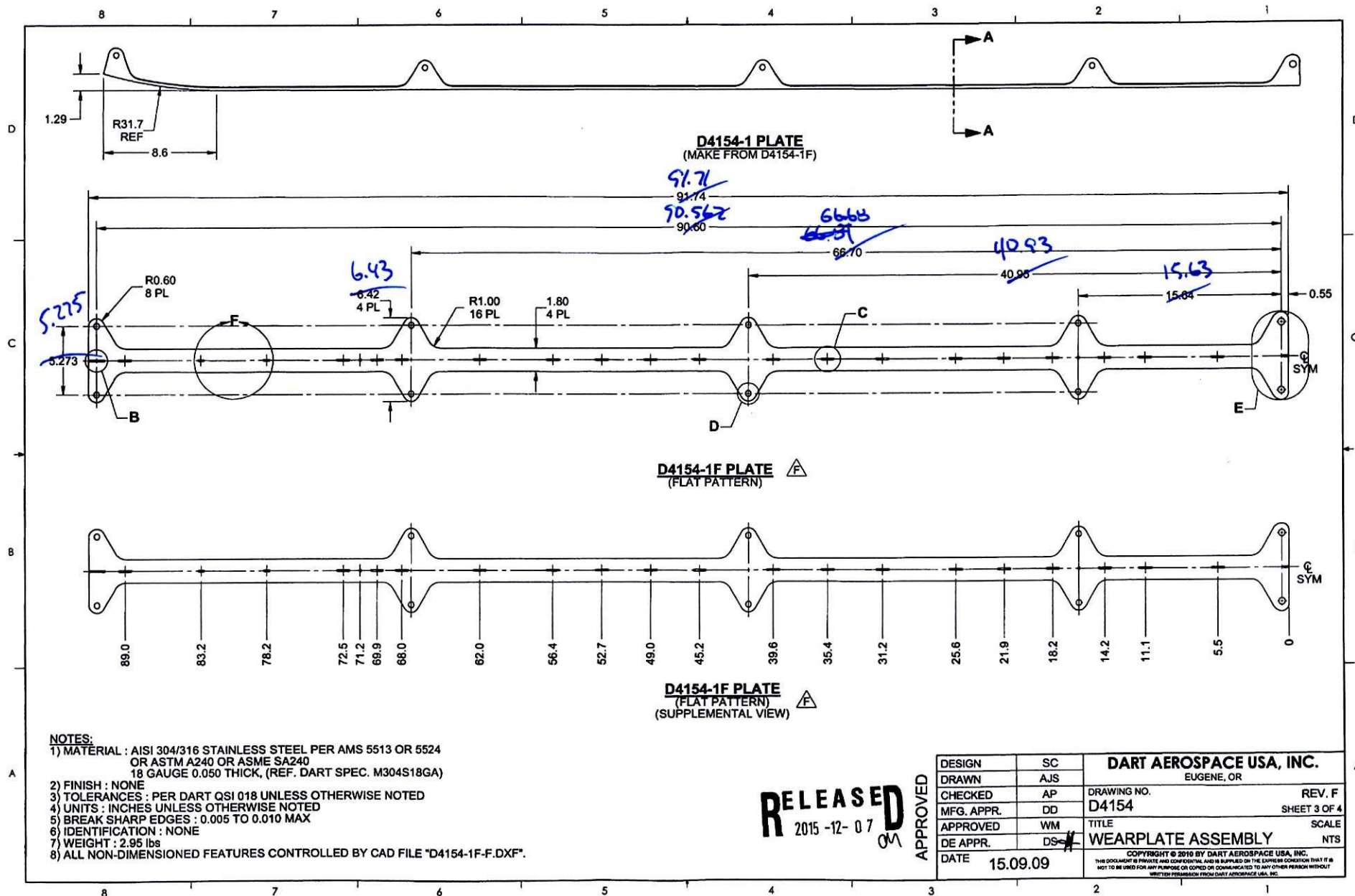
Product ID#	Coil #	I D	U TS	20C .2% YS	20C ELONG	%	HARD	Tail
		C R	KSI	KSI	-2"	RH		
05X0L3 AA		F T	99.26	53.12	48.68	88.00		87.00

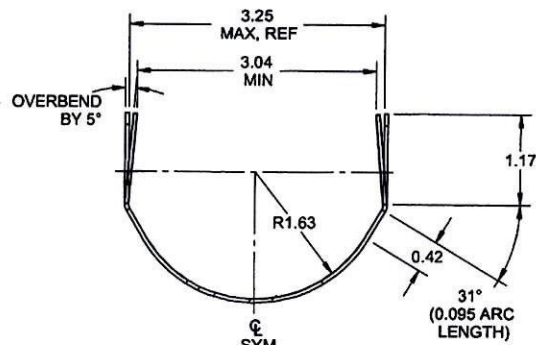
05X0L3 AA	05X0L3 A	F T	99.26	53.12	48.68	88.00	87.00
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NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

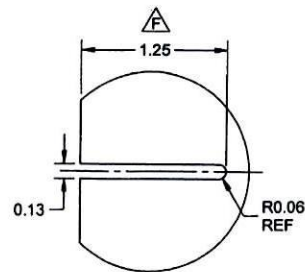
Technical
Dept. Mgr.

Handwritten signature

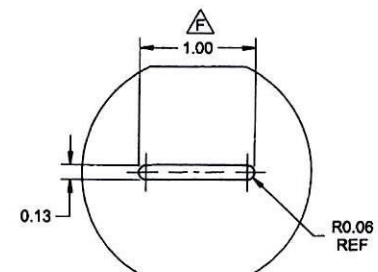




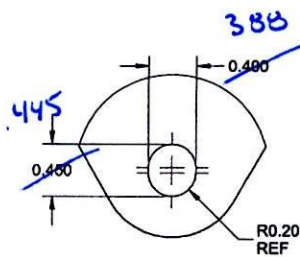
SECTION A-A
(SCALE 2.5X)



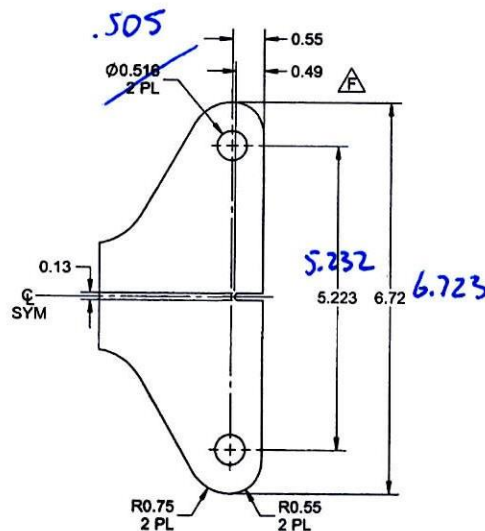
DETAIL B
SCALE 3X



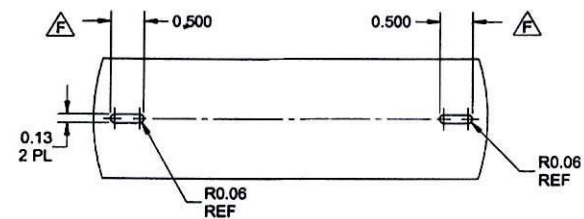
DETAIL C
SCALE 3X
8 PL



DETAIL D
SLOT DETAIL 8 PL
SCALE 3X



DETAIL E
SCALE 3X



DETAIL F
SCALE 3X

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